



FTA 27th Annual Engineers' Meeting 2011 ■ Washington, DC



Risk assessment

Update on fine-tuning the OP40

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Risk Practice Improvement

- In January, at the PMOC meeting, a risk breakout session was held.
 - The purpose was to create collaboration among risk managers, to share lessons-learned, and to gather suggestions for improvement.
- Improvement suggestions were gathered through a survey of those risk managers.

Risk Managers Survey

- Some of the key questions include:
 - What unique risk processes do PMOCs use?
 - Are there lessons learned from difficult projects?
 - What works well and what doesn't?
 - What changes should be made?
 - Have the risk reviews improved risk awareness among grantees?
- As a result, fine-tuning recommendations have been developed, and some are under-way

Survey Findings: What has been found in practice

Unique/special process?

- PMOCs often inform the grantee of the process before the risk assessment
- PMOCs have learned to apply Betas or contingencies *based on actual work progress*, not on the nominal assessment level (i.e., don't just use PE, FD, etc. values)
 - especially on projects that have simultaneous multiple phases
 - combine the phase-based values, creating “weighted” Betas and contingencies

Lessons learned from difficult projects?

- Key influences:
 - Lack of grantee technical capacity
 - Grantee not transparently sharing information
 - FTA not heeding report comments
 - Minimal PMOC/FTA staffing on high risk projects
 - Trying to play catch-up with originally inadequate budget or schedules that are politically locked-in
 - Political influences that minimize report findings

Survey Findings: Fine-tuning the process?

Experience

- Works well with the OP40 process:
 - Provides **insight** to the FTA/PMO
 - Provides **perspective** to the grantee
 - Model generally works well and causes risk to become an important project element
 - Contingency draw-down curve requirements are very useful
 - Requires risk management planning and action

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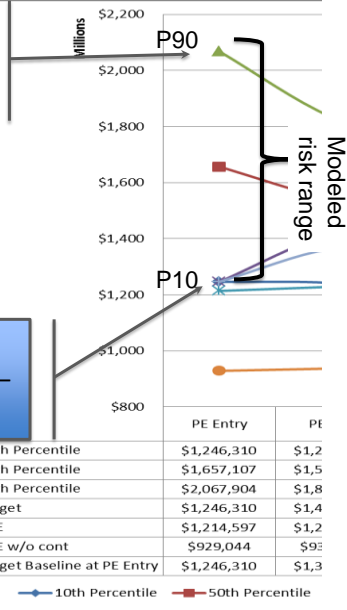
Experience, Cont'd
Needs improvement:
Consistent use of the model results, including:

Explanation of terms, such as the "P10", the "range", etc.

Sometimes these terms are mis-interpreted

Does the grantee need to have available this much funding?

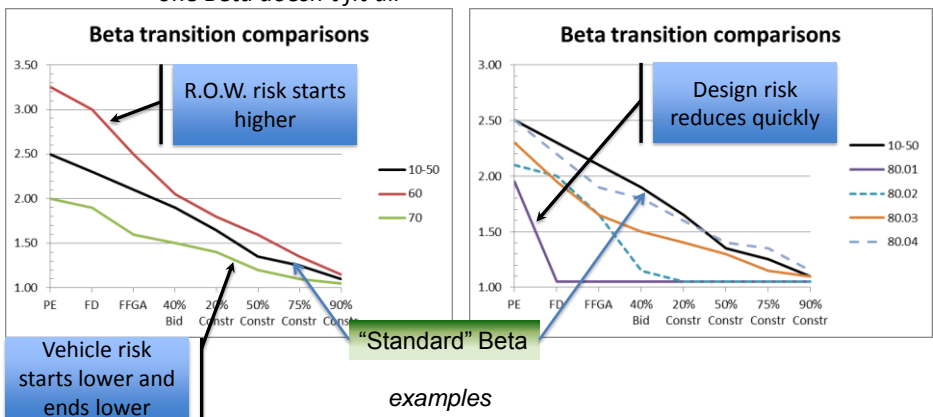
If the grantee's estimate is here— Is that OK?



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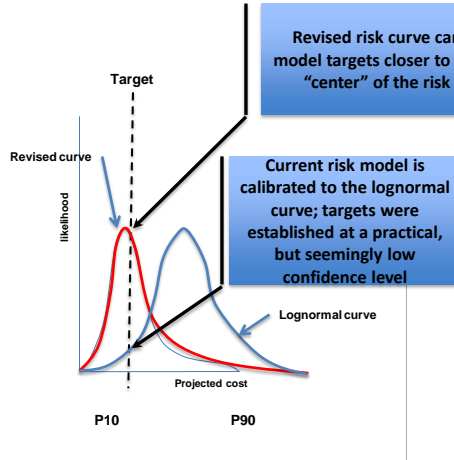
Experience, Cont'd

- Needs improvement:
 - Guidance on Beta assignments by category;
 - one Beta doesn't fit all--

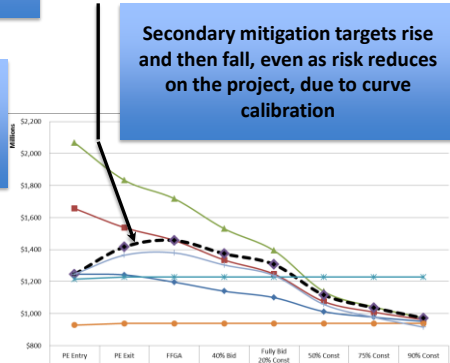


Experience, Cont'd

- Needs improvement:

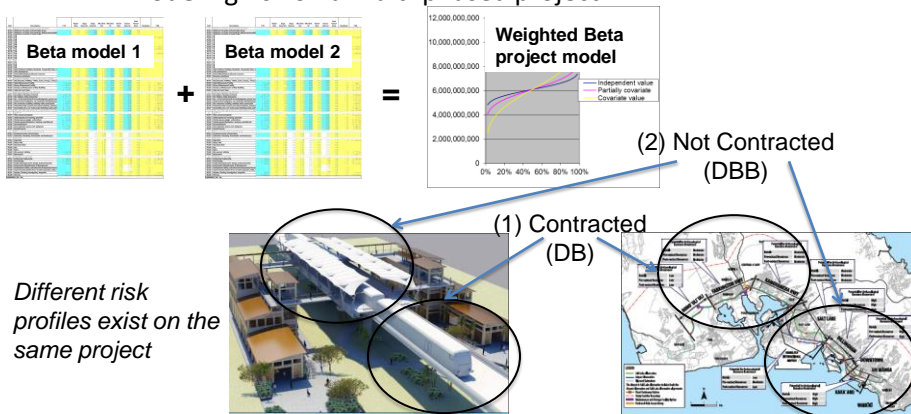


Risk "lognormal" curve was initially based on some encouraging studies, but another curve may work better.



Experience, Cont'd

- Needs improvement:
 - Modeling risk on a multi-phased project



Key PMOC-suggested changes?

- Improve PMO guidance
 - Example reports, case studies, workshops
- Fine-tune Beta values
 - By SCC code, and using historic values
- Fix the secondary mitigation targets
- Provide methods for “non-standard” projects
 - Multi-phased, fast-track, DB, etc.
- Establish a lessons-learned, continuous improvement process

Has the OP40 made the Grantees more risk-aware?

Definitely!
 Yes!
 Yes.
 Absolutely.
 Absolutely yes.
 Yes.
 Yes.
 Ja!
 iSi!
 Yes.
 Yes.
 Oui! Oui!
 Yes.

Recommendations:
Future and current work on
fine-tuning the process.

Recommendations for Guidance Enhancements:

- Continued training for FTA, PMOC, and grantees.
- Develop standards for reporting and explaining the risk results.
- Establish a repository of exemplary risk models and reports that PMOCs may use as examples.
- Establish policy direction regarding the level of risk review/assessment to apply on projects of varying size and at the various stages of project development.
- Establish clearer guidance for application of Beta factors for SCCs 60-80 (Vehicles, R.O.W., Soft Costs).

Recommendations for Technical Enhancements:

- Establishment of a revised risk curve and reworking of the secondary mitigation and contingency calculations.
- Prepare instructions on using the model for projects that have work that simultaneously exists in multiple phases, as occurs with fast-track and alternative project delivery situations.
- Establish a data base that captures forecasts vs. actual for fine-tuning the Beta factors.

Current work

- Capturing lessons learned for fine-tuning the Betas
- Revising the curve in the risk model to better fit historic data
- Developing techniques for “weighted” risk assessments on projects that exist in multiple phases



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Questions??